

REMARKS

Claims 21-45 are pending. Reconsideration of the application based on the following remarks is respectfully requested.

Claims 21-30 and 32-45 are rejected under 35 U.S.C. §103(a) over Nishi (U.S. Patent No. 6,400,441) in view of Takahashi (U.S. Patent No. 5,610,683). The rejection is respectfully traversed.

Regarding claim 21, the Office Action alleges that it would have been obvious to one of ordinary skill in the art to incorporate the liquid containing casing system of Takahashi in the projection system and measurement system of Nishi so that the exposure and the measurement is conducted via an immersion liquid which is disposed at the exposure station and a liquid is partially disposed on the second movable member or on the substrate held by the second movable member at the measurement station in order to improve the exposure apparatus. The analysis of the Office Action fails for at least the following reasons.

First, despite the assertions to the contrary in the Office Action, one of ordinary skill in the art would not have modified the device of Nishi with any feature disclosed in Takahashi. Second, the asserted combination of applied references would not have rendered obvious all of the positively recited features in independent claim 21, which the Office Action appears to ignore.

Takahashi performs the exposure operation with a wafer 2 arranged inside cassette 9 filled with liquid 23. The liquid completely fills the cassette and then the exposure is performed. See col. 5, line 63-col. 6, line 29. As such, even if Nishi were modified with Takahashi, which it would not have been for at least the reasons set forth, this combination fails to teach "a liquid is partially disposed on the second movable member or on the substrate held by the second movable member," as recited in the pending claims.

Further, the Office Action's conclusory statement that it would have been obvious to modify Nishi in view of Takahashi to obtain the feature recited in claim 21 is not enough to prove that there is any predictability to the asserted combination. The Office Action simply asserts, without evidentiary basis, that the alleged combination would "improve exposure apparatus at a low cost and enhance productivity." There is nothing in either Nishi or Takahashi to suggest such an improvement, nor has any proper evidence of record otherwise been shown that would support the mere conclusory statement made by the Office Action. The Federal Circuit has consistently reaffirmed its prior holdings in this regard, and the U.S. Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 US 398, 127 S.Ct. 1727 confirmed, that "rejections on obviousness grounds cannot be sustained by mere conclusory statements, and instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.* at 1741 (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). This standard is not met here, based on the diverse teaching of the individually applied references, and the failure of the Office Action to provide any other evidentiary basis for its conclusion. The asserted articulated reasoning has no rational underpinning.

Thus, one of ordinary skill in the art would not modify Nishi in view of Takahashi to render obvious the features recited in independent claim 21, and such has not been properly shown to otherwise be the case. Claims 35 also would not have been obvious in view of the applied references for reasons similar to those explained above regarding claim 21.

Claim 42, specifically recites a first liquid supply device that forms an immersion area on the substrate held by the first movable member at the exposure station; and a second liquid supply device that forms an immersion area partially on a substrate held by a second one of the movable member at the measuring station. As discussed above, Takahashi performs the exposure operation with a wafer 2 arranged inside cassette 9 filled with liquid 23, *i.e.*, the

liquid completely fills the cassette and then the exposure is performed. In order for Takahashi to be modified to obtain the features recited in claim 42, the liquid would have to be deposited and then emptied, and a new liquid deposited. One having ordinary skill in the art would not make this modification because it would impermissibly modify the principle operation of the Takahashi device and would not result in the features recited in claim 42.

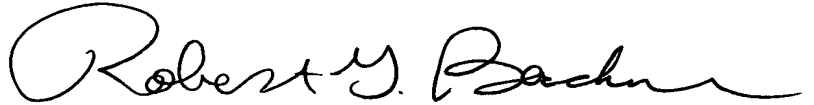
That is, Nishi in view of Takahashi would not have rendered obvious the features recited in claims 21, 35 and 42. Claims 22-34, 36-41, 44 and 45 also would not have been rendered obvious for at least their dependence on claims 21, 35 and 42 for at least the reasons discussed above regarding claims 21, 35 and 42 and for the separately patentable features recited in the enumerated claims. Withdrawal of the rejection is respectfully requested.

Claim 31 is rejected under 35 U.S.C. §103(a) over Nishi in view of Takahashi further in view of "what is well known in the art." "What is well known in the art," as alleged by the Office Action, fails to overcome the deficiencies of Nishi and Takahashi explained above regarding claim 21. Thus, the applied references would not have rendered obvious the features recited in claim 31 for at least the dependence of claim 31 on claim 21 and for the separately patentable features that these claims recite. Withdrawal of the rejection is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 21-45 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachments:

Petition for Extension of Time
Request for Continued Examination with a
Request for a Two-Month Suspension of Action

Date: May 27, 2010

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